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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,699

07/20/2006

Yukihiro Naito

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FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 Fifth Avenue
16TH Floor
NEW YORK, NY 10001-7708

EXAMINER

VILLECCO, JOHN M

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

01/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,699	Applicant(s) NAITO, YUKIHIRO	
	Examiner JOHN M. VILLECCO	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 6-9 is/are rejected.
- 7) ☒ Claim(s) 2,3,5 and 10-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The disclosure is objected to because of the following informalities:
 - On page 11 of the specification, applicant refers to the normal pixel detection block as reference number 194. This appears to be a typographical error as the normal pixel detection block has been referred to as reference number 104 in all previous references.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
4. Claims 6-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. More specifically, in order for a process to qualify as a §101 statutory process, a process claim should positively recite the other statutory class to which it is tied or positively recite the subject matter that is being transformed. Therefore, since claims 6-8 merely recite a process claim without either a positive recitation to the other statutory class or a positive recitation of the subject matter being transformed, the claims are non-statutory. See the Patent Office Policy Document titled "Clarification of "Processes" under 35 USC § 101" dated

Art Unit: 2622

May 15, 2008 and found at the following website

<<http://www.uspto.gov/web/patents/memorandum.htm>>

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1, 4, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (U.S. Patent No. 6,002,433).**

7. Regarding *claim 1*, Watanabe discloses a defective pixel detecting circuit capable of detecting defective pixels with low power consumption and high precision. More specifically and as it relates to the applicant's claims, Watanabe discloses a normal pixel detection means (comparator, 11) for detecting out a normal pixel from pixels out from a solid-state imaging device (CCD, 2) and a defective pixel detection means (comparator, 15) for detecting a defective pixel out of pixels that are not factored out by the normal pixel detection means (comparator, 11). See column 6, line 45 to column 8, line 12.

8. As for *claim 4*, Watanabe discloses the use of a memory (main image memory, 4) used in both the operation of the normal pixel detection means (comparator, 11) and the defective pixel detection means (comparator, 15).

9. *Claim 6* is interpreted to be a method claim corresponding to claim 1. Please see the discussion of claim 1 above.

Art Unit: 2622

10. *Claim 9* is interpreted to be substantively equivalent to claim 1. Please see the discussion of claim 1 on the preceding page.

Allowable Subject Matter

11. Claims 2, 3, 5, and 10-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2 and 10, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the normal pixel detection means comprises a level difference calculation means adapted to calculate a level difference between the pixel to be inspected and an neighboring pixel, and a comparison means adapted to compare said level difference with a first threshold, so that when said level difference is less than said first threshold, the pixel to be inspected is determined as normal.

As for claims 3 and 11, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the normal pixel detection means comprises a level difference calculation means adapted to calculate level differences between the pixel to be inspected and a plurality of neighboring pixels, a comparison means adapted to compare each of said plurality of level differences calculated at said level difference calculation means with a first threshold, and a determination block adapted to calculate the number of neighboring pixels at which said level difference is less than said first threshold, and to compare the number of neighboring pixels calculated by said calculation with a second threshold, so that

Art Unit: 2622

when said number of neighboring pixels is greater than said second threshold, the pixel to be inspected is determined as normal.

With regard to claims 5 and 18, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the defective pixel detection means advances to a low power consumption mode with clocks stopped when the pixel to be inspected is determined at said normal pixel detection means as normal.

Claims 7 and 8 would be allowable if rewritten to overcome the 35 USC § 101 rejection for the same reasons as indicated for claims 2 and 3, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. VILLECCO whose telephone number is (571)272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN M. VILLECCO/
Primary Examiner, Art Unit 2622
January 25, 2009